# UNITED STATES PATENT AND TRADEMARK OFFICE

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 09/695,828 | 10/26/2000 | Robert Scott Nieboer | 2907-104P | 1872 |

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| 7590 05/09/2003 | |

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| EXAMINER |
|---|
| THOMPSON JR, FOREST |

| ART UNIT | PAPER NUMBER |
|---|---|
| 3625 | |

DATE MAILED: 05/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

| | Application No. | Applicant(s) |
|---|---|---|
| **Office Action Summary** | 09/695,828 | NIEBOER ET AL. |
| | **Examiner** | **Art Unit** |
| | Forest Thompson Jr. | 3625 |

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on <u>26 October 2000</u>.

2a)☐ This action is **FINAL**.    2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) <u>42-53</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>42-53</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>26 October 2000</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: .

## DETAILED ACTION

1.      Claims 42-53 have been examined.


2.      This application is a continuation-in-part of U.S. Patent Application #09/359,686,

now U.S. Patent No. 6,418,419.


### *Claim Objections*

3.      Claims 42-52 are objected to because of the following informalities:

Claim 42 states "the price" in line 3, and "the price" in line 7 on pg. 12. There is

no antecedent basis for this language. Applicant should change "the price" in line 3 to

read "[the] a price" to provide proper antecedent basis. Correction is required.

Claim 42 states "another item as an" in line 7 on pg. 12. Examiner cannot be

certain of the intended meaning that applicant wishes to portray in this disclosure, as

this is incorrect grammar. Examiner recommends changing the language to read

"another item [as] is an" in line 7. Correction is required.

Claim 43 states "the price" in lines 3-4 and line 8. There is no antecedent basis

for this language. Applicant should change "the price" in lines 3-4 to read "[the] a price"

to provide proper antecedent basis. Correction is required.

Claim 43 states "the dependent variable" in line 8 and lines 9-10. There is no

antecedent basis for this language. Applicant should change "the dependent variable"

in line 8 to read "a dependent variable" to provide proper antecedent basis. Correction

is required.

Claim 43 states "another item as an" in line 9 on pg. 13. Examiner cannot be certain of the intended meaning that applicant wishes to portray in this disclosure, as this is incorrect grammar. Examiner recommends changing the language to read "another item [as] is an" in line 9. Correction is required.

Claim 45 states "the price" in line 3 and line 8. There is no antecedent basis for this language. Applicant should change "the price" in line 3 to read "[the] a price" to provide proper antecedent basis. Correction is required.

Claim 45 states "the dependent variable" on line 8 and line 10. There is no antecedent basis for this language. Applicant should change "the dependent variable" on line 8 to read "a dependent variable" for clarity. Correction is required.

Claim 45 states "another item as an" in lines 9-10 on pg. 14. Examiner cannot be certain of the intended meaning that applicant wishes to portray in this disclosure, as this is incorrect grammar. Examiner recommends changing the language to read "another item [as] is an" in lines 9-10. Correction is required.

Claim 47 states "the dependent variable" on lines 5-6 and line 7. There is no antecedent basis for this language. Applicant should change "the dependent variable" on lines 5-6 to read "a dependent variable" for clarity. Correction is required.

Claim 47 states "the price" in line 6 and line 7. There is no antecedent basis for this language. Applicant should change "the price" in line 6 to read "[the] a price" to provide proper antecedent basis. Correction is required.

Claim 47 states "another item as an" in lines 6-7 on pg. 15. Examiner cannot be certain of the intended meaning that applicant wishes to portray in this disclosure, as

this is incorrect grammar. Examiner recommends changing the language to read "another item [as] is an" in lines 6-7. Correction is required.

Claim 49 states "the price" in line 3 and line 7. There is no antecedent basis for this language. Applicant should change "the price" in line 3 to read "[the] a price" to provide proper antecedent basis. Correction is required.

Claim 49 states "the dependent variable" on line 7 and lines 8-9. There is no antecedent basis for this language. Applicant should change "the dependent variable" on line 7 to read "a dependent variable" for clarity. Correction is required.

Claim 49 states "another item as an" in line 8 on pg. 16. Examiner cannot be certain of the intended meaning that applicant wishes to portray in this disclosure, as this is incorrect grammar. Examiner recommends changing the language to read "another item [as] is an" in line 8. Correction is required.

Claim 51 states "The conditional order transaction network of claim 1." Applicant has canceled claim 1. Therefore, correction is required.

Claim 52 states "The conditional order transaction network of claim 41." Applicant has canceled claim 41. Therefore, correction is required.

Claims 44, 46, 48, and 50 are dependent from objected to claims. Therefore, the same objection applies. Correction is required.

### Double Patenting

4.        The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11

F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi,* 759 F.2d 887, 225
USPQ 645 (Fed. Cir. 1985); *In re Van Ornum,* 686 F.2d 937, 214 USPQ 761 (CCPA
1982); *In re Vogel,* 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,*
418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be
used to overcome an actual or provisional rejection based on a nonstatutory double
patenting ground provided the conflicting application or patent is shown to be commonly
owned with this application.  See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a
terminal disclaimer.  A terminal disclaimer signed by the assignee must fully comply with
37 CFR 3.73(b).

5.      Claims 42, 43, 45, 47, 51, and 53 are rejected under the judicially created

doctrine of double patenting over claims 1, 8, 24, 41, and 43 of U. S. Patent No.

6,418,419 since the claims, if allowed, would improperly extend the "right to exclude"

already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the

patent and is covered by the patent since the patent and the application are claiming

common subject matter, as follows:

-       Claim 42 of this application discloses the invention of the combination of

        claims 1 and 8 of the patent.

-       Claims 43,45 and 47 of this application separately disclose the invention of

        claim 43 of the patent of the patent.

-       Claim 51 of this application discloses the invention of either of claims 23 and

        42 of the patent.

-       Claim 53 discloses the invention of claim 43 of the patent.

Furthermore, there is no apparent reason why applicant was prevented from

presenting claims corresponding to those of the instant application during prosecution of

the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158

USPQ 210 (CCPA 1968). See also MPEP § 804.

Claims 44, 46, and 48 depend from rejected claims; therefore, claims 44, 46, and

48 are rejected.


***Allowable Subject Matter***

5.     The following is an examiner's statement of reasons for allowance:

Claims 42-50 and 52 would be allowable over the prior art of record, if rewritten

or amended to overcome the objections to the claims set forth in this Office Action.

Claims 51 would be allowable over the prior art of record if it was rewritten to

show dependence from corresponding independent claim 42.

Claim 53 is allowable over prior art.

Applicant's invention presents a network and workstation for conditional trading

of items, such as securities and contracts. The key elements, which are specified in the

independent claims #'s 42, 43, 45, 49, and 53, which differentiate the invention over

prior art, are:

-        controller means coupled to each of the trader terminals over a communications

network;

-        an item input in the form of an algorithm with constraints thereon,

-        a variable number of trader terminals for entering an order for an item or security

instrument that represents a willingness to transact the algorithm,

-     a price set forth within an order is represented as an algorithm with constraints thereon,

-     the price for the trade of one item is a dependent variable of the algorithm within the constraints,

-     dynamically changing price of another item is an independent variable of the algorithm within the constraints,

-     the price is a dependent variable being continuously changeable responsive to changes in price of the independent variable;

-     matching or comparing, in accordance with the constraints and conditions, algorithmic or non-algorithmic buy/sell orders with algorithmic or non-algorithmic sell/buy orders; and

-     the algorithm representing a buy or sell order.


The key elements, which are specified in independent claim # 47 which differentiates the invention over prior art, are:

-     processing data from a variable number of trader terminals;

-     controlling a computer coupled to each of the trader terminals over a communications network and receiving as inputs:

-     an item input in the form of an algorithm with constraints thereon,

-     a variable number of trader terminals for entering an order for a security instrument that represents a willingness to transact the algorithm,

-       a price set forth within an order is represented as an algorithm with constraints

thereon,

-       the dynamically changing price for the trade of one item is a dependent variable

of the algorithm within the constraints,

-       a price of another security is an independent variable of the algorithm within the

constraints,

-       the price as the dependent variable being continuously changeable responsive to

changes in price of the independent variable,

-       matching or comparing, in accordance with the constraints and conditions,

algorithmic buy/sell orders with algorithmic or non-algorithmic sell/buy orders;

-       the algorithm representing a buy or sell order; and

-       simultaneously executing a trade of said items in the same or diverse markets as

a single electronically matched trade.


Also, claim 42 discloses the claimed feature of one of the conditions being the

requirement that two or more securities are tradable contemporaneously as a

contingent trade of those respective securities.

Additionally, claims 43, 45, 47, 49, and 53 disclose the claimed feature of

simultaneously executing a trade of said items in the same or diverse markets as a

single electronically matched trade.

The combination of theses features make claims 42, 43, 45, 47, and 49 unique

and distinct over prior art. Prior art discloses some of the aspects or properties of the

invention, as well as the aspect of buyers defining contract terms(Shepherd [U.S. Patent

No. 6,134,53], col. 9 lines 20-22), whereas the invention does not allow buyers to define

contract terms; system administrators pre-define and input the securities and contracts

(see Paper #7, pg. 9, 3rd para.). Prior art does not disclose or suggest the features as

disclosed in applicant's invention and stated in all of the independent claims 42, 43, 45,

47, and 49.

6.      Prior art of record includes:

-       Shepherd (U.S. Patent No. 6,134,536) discloses methods and apparatus

which deal with the management of risk relating to specified, yet unknown, future

events;

-       Borgato (U.S. Patent No. 5,950,178) discloses representations of stock

market activity may be represented on a graphics computer monitor/screen for

monitoring activity related to stocks and the market;

-       Williams et al. (U.S. Patent No. 5,999,918) discloses a computer interface

system that includes interactive interface controls as well as aural and kinetic interface

controls to assist in educating a user, in profiling a user, and in controlling and

monitoring the implementation of actions involving probabilistic distributions;

-       Wiseman  (U.S. Patent No. 5,168,446) discloses a system is provided for

processing spot trades in selected commodities among a group of trading stations in a

communication network through a series of structured stages;

- Ferstenberg et al. (U.S. Patent No. 5,873,071) discloses, in a preferred embodiment, this invention includes software processes distributed on one or more computer systems that exchange messages in order to facilitate an intermediated exchange of financial commodities between a plurality of participants;

- Kull, David; Keough, Lee; "The house of games;" Computer Decisions; v20, n8, pg. 43(11); August 1989, discloses the New York Stock Exchange tries to change computer-triggered trading schemes and restore investor confidence after the October 19, 1987 stock market collapse;

- Scholldorf (EPO Patent No. 0 411 748 A2) discloses a risk control matching system for trading instruments, such as foreign exchange currencies, in which bids are automatically matched against offers for given trading instruments;

- Lupien (EPO Patent No. 0 401 203) discloses an automated system for managing one or more large investor portfolios containing both cash and numerous, diversified securities in a real time environment providing liquidity to the securities markets while maintaining predetermined portfolio objectives for each portfolio;

- "State Street and the Boston Stock exchange Announce Exclusive Agreement On State Street's Bond Connect in the United States;" Business Editors; 19 August 1998; discloses limitations in the traditional trading environment by offering investors the ability to formulate orders linked to portfolio strategy; and

- Lee, Charles M.C.; "Market integration and price execution for the NYSE-listed securities;" Journal of finance; v48; n3; pg. 1003(30); July 1993; discloses, for

NYSE listed securities, the price execution of seemingly comparable orders differs systematically by location.

7.  Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."
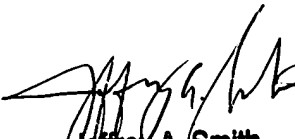
### *Conclusion*

8.    Any inquiry concerning this communication or earlier communications from the examiner should be directed to Forest Thompson Jr. whose telephone number is (703) 306-5449. The examiner can normally be reached on 6:30-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wynn Coggins can be reached on (703) 308-1344. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and (703) 305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

F. Thompson
May 5, 2003

Jeffrey A. Smith
Primary Examiner